acetylcholinesterase; examples of suitable fluorescent materials include umbelliferone, fluorescein, fluorescein isothiocyanate, rhodamine, dichlorotriazinylamine fluorescein, dansyl chloride or phycoerythrin; an example of a luminescent material includes luminol; and examples of suitable radioactive material include S-35, Cu-64, Ga-67, Zr-89, Ru-97, Tc-99m, Rh-105, Pd-109, In-111, I-123, I-125, I131, Re-186, Au-198, Au-199, Pb-203, At-211, Pb-212 and Bi-212. The antibodies may also be labelled or conjugated to one partner of a ligand binding pair. Representative examples include avidin-biotin and riboflavin-riboflavin binding protein. Methods for conjugating or labelling the antibodies discussed above with the representative labels set forth above may be readily ~~Pee~~ performed. PS 12/7/98

The antibodies may also be used to detect disease or pathogens *in vitro* using techniques known in the art. The methods rely on the binding interaction between the antibodies an antigenic determinant of a protein specific to the pathogen or disease. Examples of such methods are radioimmunoassays, enzyme immunoassays (e.g. ELISA), immunofluorescence, immunoprecipitation, latex agglutination, hemagglutination, and histochemical tests such as enzyme-linked immunosorbant assay (ELISA), and western blotting.

The antibodies of the present invention may be used to treat enteric infections such as rotavirus infection and enterotoxigenic *Escherichia coli* (ETEC) as these are the major causitive agents of disease in newborns and children. Antibodies may be prepared that contain variable regions that are specific for these pathogens or parts of the pathogens.

The present invention can also be used to prepare pathogen free eggs. For example, an antibody specific for a particular pathogen can be produced in an egg-laying animal and transported to the egg where it will neutralize the particular pathogen. In one embodiment, the antibody may be an anti-salmonella antibody and can be used to prepare salmonella free eggs.

Consequently, in another aspect, the present invention relates to the preparation of an egg that is free of a particular pathogen comprising: